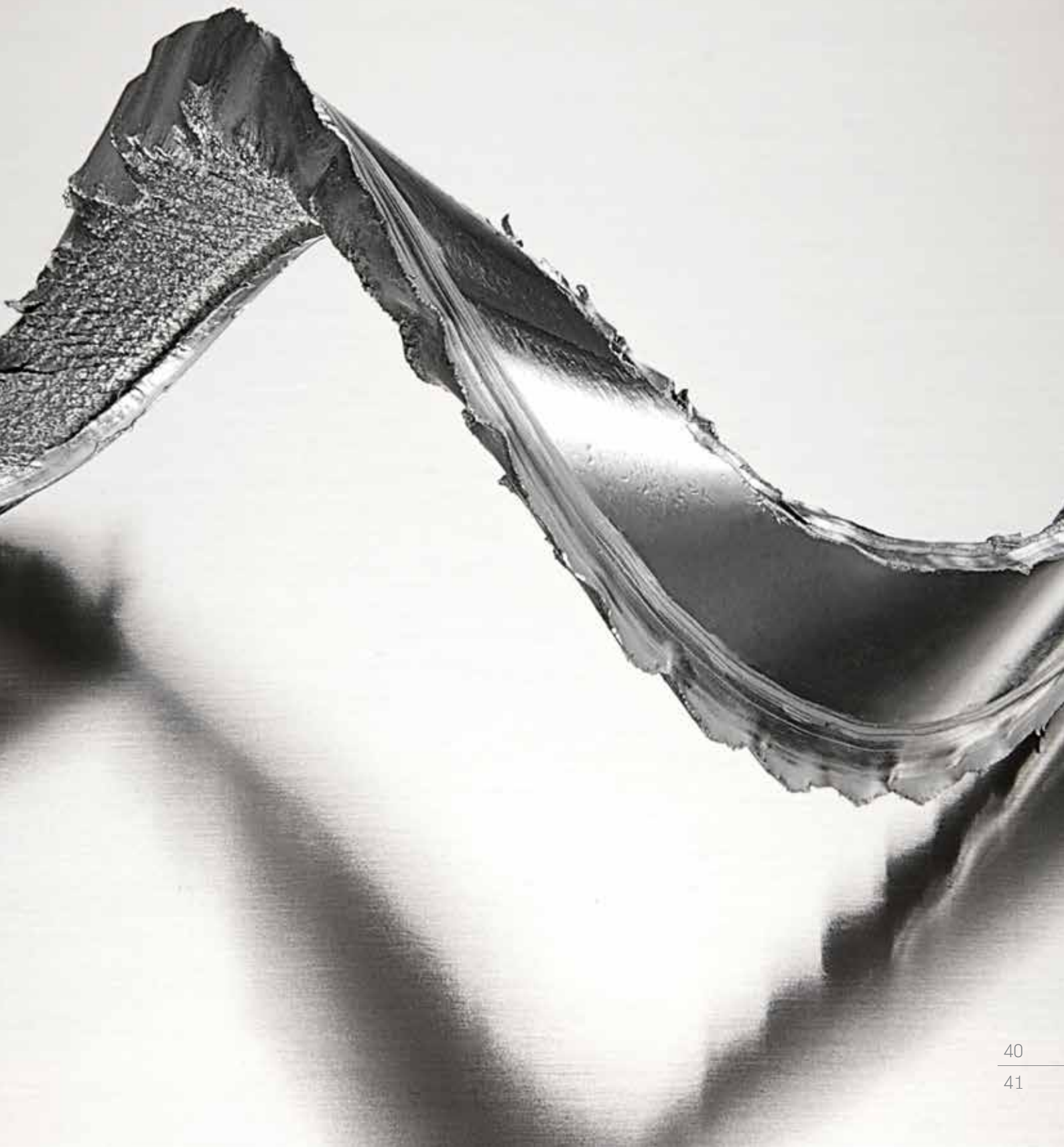


03

Technical data . C 22





# 03.1

## Technical data . C 22

<b>Working area</b>	Traverse	X axis	450 mm		
	Traverse	Y axis	600 mm		
	Traverse	Z axis	330 mm		
	Rapid linear traverse (dynamic)	X-Y-Z	30 (50) m/min.		
	Linear acceleration (dynamic)	X-Y-Z	8 (15) m/s <sup>2</sup>		
	Linear feed force	X-Y-Z	4500 N		
	Max. vertical table clearance		470 mm		
	Max. workpiece diameter		Ø 450 mm		
	Max. workpiece height		370 mm		
<b>Main spindle drive</b>	Speed	15000 rpm	SK 40	●	
	Main power/Torque	20% c.d.f.	31 kW / 98 Nm		
	Speed	18000 rpm	HSK A 63 / HSK A 50	○	
	Main power/Torque	20% c.d.f.	31 kW / 98 Nm		
	Speed	30000 rpm	HSK A 50	○	
	Main power/Torque	20% c.d.f.	37 kW / 32 Nm		
	Speed	42000 rpm	HSK E 40	○	
	Main power/Torque	20% c.d.f.	35 kW / 17.5 Nm		
<b>Control unit</b>	Heidenhain		iTNC 530 / TNC 640	●	
	Siemens		Sinumerik 840 D sl	○	
<b>Tool changer (pick-up)</b>	Interface	SK 40 / ● HSK A 63 ○	HSK A 50 ○	HSK E 40 ○	
	Magazine pockets	55	65	65	
	Chip-to-chip time*	approx. 4.5 s	approx. 4.5 s	approx. 4.5 s	
	*(chip-to-chip times for 3-axis units were calculated in keeping with German standard VDI 2852, page 1)				
	Max. tool length	250 mm	250 mm	250 mm	
	Max. tool diameter with empty adjacent pockets	Ø 80 mm Ø 125 mm	Ø 65 mm Ø 125 mm	Ø 65 mm Ø 125 mm	
	Max. magazine load	220 kg	195 kg	163 kg	

<b>Extension of tool storage capacity</b>				
Additional magazine ZM 43		Additional 43 pockets		○
Additional magazine ZM 87		Additional 87 pockets		○
Additional magazine single ZM 192		Additional 192 pockets		○
Additional magazine double ZM 462		Additional 462 pockets		○
Interface	SK 40 / HSK A 63	HSK A 50	HSK E 40	
Max. tool length	250 mm	250 mm	250 mm	
Max. tool diameter with empty adjacent pockets	Ø 80 mm Ø 125 mm	Ø 65 mm Ø 125 mm	Ø 65 mm Ø 125 mm	
Max. tool weight	8 kg	6 kg	2.5 kg	
<b>Table variants*</b>				
NC swivelling rotary table	Ø 320	Ø 320		
Table plate with clamping surface	Ø 320 mm	Ø 320 mm		
Swivelling range	+/- 135°	+/- 135°		
C-axis drive mode	torque	worm		
Swivelling axis A speed				
One-sided drive	25 rpm	25 rpm		
Tandem drive	55 rpm	-		
Rotary axis C speed	80 rpm	40 rpm		
Max. table load	150 kg	300 kg		
T grooves	4 units / 14 H7 star-shaped	4 units / 14 H7 star-shaped		
Table plate with clamping surface	-	Ø 450 x 360 mm		
System table (can be extended with table plate)	Ø 320 mm	Ø 320 mm / Ø 450 x 360 mm		
Zero-point system / pallet clamping system				
Installation clamping device	-	SK 50		
Installation clamping device	-	HSK 100		
Rigid clamping table		●		
Clamping surface		600 x 630 mm		
Max. table load		750 kg		
T grooves		10 units / 14 H7 parallel		

\*All tables available on demand

- Included in standard delivery
- Available upon request

<b>Position measuring system, direct</b>	Resolution	0.0001 mm ●
<b>Positional tolerance</b>	<p>Tp in X-Y-Z axes according to VDI/DGQ 3441</p> <p>(calculated at a constant ambient temperature of 20 °C +/-1 °C. Our products are subject to the German Export Law and require authorization since the attainable precision may be less/greater than 6 µm.)</p>	0.008 mm
<b>Chip slide</b>	<p>Space-saving mounting on the left or right</p> <p>Capacity</p>	<p>210 l ●</p>
<b>Chip conveyor</b>	<p>Scraper belt or hinge conveyor ○</p> <p>Chip conveyor, left or right (short version)</p> <p>Capacity</p> <p>Chip conveyor to the rear (long version)</p> <p>Capacity</p> <p>Chip conveyor ejection height</p> <p>Chip cart</p>	<p>280 l</p> <p>280 l</p> <p>1100 mm</p> <p>450 l</p>
<b>Internal cooling lubricant supply with Paper band filter</b>	<p>Capacity of standard tank</p> <p>Capacity of cooling lubricant tank</p> <p>Pressure (manually adjustable up to)</p> <p>Mains connection (ICS)</p> <p>Power consumption (ICS)</p>	<p>100 l</p> <p>570 l</p> <p>max. 40 bar / 20 l/min</p> <p>-</p> <p>-</p> <p>100 l ○</p> <p>750 l</p> <p>max. 80 bar / 29 l/min</p> <p>400 V / 50 Hz</p> <p>12 kVA</p>
<b>Hydraulics</b>	Operating pressure	120 bar ●
<b>Central lubrication</b>	Minimum grease lubrication quantity	●
<b>Connected loads (machine)</b>	<p>Mains connection</p> <p>Power consumption</p> <p>Compressed air</p>	<p>400 V / 50 Hz</p> <p>46 kVA</p> <p>6 bar</p>
<b>Weight</b>	(standard version without optional extras, workpieces and cooling lubricant)	Approx. 8.7 t

● Included in standard delivery

○ Available upon request

